

5,458,852

issued as Patent No. 6,143,576, which is a continuation in part of U.S. Patent Application No. 08/447,981, which issued as U.S. Patent No. 5,885,527 on March 23, 1999, which is a divisional application of U.S. Patent Application No. 08/065,528 (abandoned), filed 19 May 1993, which was a continuation-in-part of U.S. Patent Application No. 07/887,526 filed 21 May 1992 which issued as Patent 5,458,852 on October 17, 1995; and U.S. Patent Application No. 08/902,775 which issued U.S. Patent No. 6,271,040, *this application is a continuation in part of* and *this application* which is a continuation in part of U.S. Patent Application No. 08/810,569 which issued as Patent No. 6,143,576, from each of which priority is claimed, and each of which is fully incorporated by reference herein.

IN THE CLAIMS

Please cancel claims 1-7<sup>3</sup> provided in the original specification and enter the following new claims: These new claims are reflected in the specification filed herewith.

Rule 126 74. A method for regulating fluid flow in a device that conducts fluid through one or more capillary channels, comprising:

introducing fluid into a capillary channel comprising (i) a first capillary region comprising a hydrophilic surface and (ii) a second capillary region comprising a hydrophobic surface adjacent to said first capillary region, whereby fluid flows through said first capillary region to contact said hydrophobic surface.

2 75. The method of claim 74, wherein said device further comprises a third capillary region comprising a hydrophilic surface adjacent to said second capillary region, wherein said hydrophobic surface controls the rate of flow of said fluid into said third capillary region.

3 76. The method of claim 75, wherein said hydrophobic surface delays fluid flow into said third capillary region until rendered hydrophilic.

4 77. The method of claim 74, wherein said device comprises a plurality of capillary channels, one or more of which comprise a region comprising a hydrophobic surface.

5 78. The method of claim 76, wherein said device further comprises a vent.